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H. T. WEBSTER, M. D., EDITOR.

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EPITHELIOMA OF THE LOWER LIP AND REMOVAL BY EXCISION.

BY JOHN FEARN, M. D., OAKLAND.

THE term cancer implies a malignant growth as distinguished from a non-malignant or benign growth. This malignant growth tends to invade surrounding tissues, especially glandular and cutaneous tissues. And as it invades it destroys.

Epithelioma or skin cancer is one of the least malignant forms of cancer.

It may remain in an almost quiescent condition for years, existing as a small apparently herpetic spot or a roundish, slightly elevated, colorless infiltration, giving no signs of malignancy or trouble, scarcely noticed by the patient or his friends even though it be in a prominent position. Eventually it begins to be aggressive, the growth becomes more dense and indurated, or hardened, usually circular or oval. When the diseased spot becomes about the size of a three or five-cent piece, the central portion becomes depressed; and here we will be likely to get breaking down of tissue.

In some cases after a long period of almost quiescence, the disease will suddenly put on an aggressive form, and gradually deep infiltration of tissues, and destruction of the parts, will take place at a rapid rate.

Statistics show that epithelioma usually attacks the face, thirty per cent of all cases appearing upon the lip. Without going into the etiology of the disease, which in the nature of things must be obscure, it is more to our interest and to the interest of our patients to inquire what can be done curative or palliative for the sufferer. And the first question to be answered is this: After a true cancerous growth has started, epithelioma or otherwise, can it be overcome and eradicated by purely systemic means without local treatment? My answer, based upon some observation and experience, together with considerable study of the subject, leads me to give an unqualified *No* to this question. The growth in my opinion must be excised or destroyed locally. And, in connection with this answer, let me say that no one has greater intelligent faith in internal medication and attention to diet than I have. The next question that comes up for answer is: Can we hope by local and internal medication to entirely remove the difficulty in any case so that it will never return? To this question, experience in quite a number of cases and observation of many cases treated by others, leads me to the conclusion that in diseases of a true cancerous character in a very large percentage of cases the disease will return; and some of those which look the most innocent are the soonest to return. Therefore, while we promise all we can for our patients, we can in no case promise absolute immunity from the disease in the future. In treating a large cancer of the left breast some years ago, I so destroyed the vitality of the cancerous mass that it rolled out of its bed like a kernel from a nutshell; but before that chasm could be healed, two others were making their appearance in adjacent structures. These progressed so rapidly that I freely gave the family to understand that there was no hope,—that the removal of the tumor could be accomplished, but it would hasten the death of the patient.

A wandering cancer quack, hearing of the case, assured them

he could cure the patient. He took her under treatment, removed the mass, and in a few days she was dead. It might be said, however, that cancer specialists are more successful than regular practitioners. My opinion is that they are not. I grant you that as a rule they will promise to cure where experienced, well-read general practitioners would make no such promises. I know by experience they frequently fail to make good their promises. I also know they seldom fail to collect their bills. They go as a rule on the plan, No pay down, no treatment. About a year ago I was called by a specialist to see a wonderful triumph of his skill; on examining the patient's tongue I could see the chasm where the cancer had just been removed by medicine, not the knife. The specialist was in high glee; the patient was delighted to think he was so well out of the woods. I said nothing to discourage the poor sufferer. But when alone with the specialist, I said, "Invite me round in two years at farthest, and I will tell you whether your patient is cured." Why, in less than two months the trouble was right back, and the patient in despair.

Not many months ago my services were sought in behalf of an old person who had an induration of the lip. Considering the patient's age and the fact that the lip was giving no trouble, I advised that it be let alone; my advice was disregarded, a specialist was called; with his plaster he removed the mass; in but a three months' time he repeated the operation three times, the difficulty returning each time. Before the third operation was completed the patient died, other troubles being aggravated and his death hastened by the intense suffering produced by the plasters of the cancer specialist.

As regards treatment I will say, If the trouble is of the mammary gland, and you are called early, excision of the breast is the quickest method, and the method which offers the best hope of success. But it must be done early before healthy tissues in the neighborhood are infiltrated. Ten years ago my services were sought in behalf of a woman who had long suffered with a diseased mammary gland. On examination I found what I considered malignant trouble; it was a very bad-looking breast. I gave my opinion that amputation of the breast was the best pro-

cedure. But this she would not hear to. In her case local and systemic treatment was attended with good results. The induration was removed, to a large extent the wounds healed, and she had some years of comparative comfort. I removed from that part of the country, and, though she is still living, she still suffers, at times quite severely; and I believe amputation would have been the best thing for her. When the trouble is of the lip, a case of epithelioma, if the diseased spot is quite large, some of the various escharotics, as arsenic, chromic acid, chloride of zinc, sul. zinc, sanguinaria, ergot, etc., may be used to destroy the mass; then lotions or cerates to heal the wound. If the place is not too large I am firmly convinced that the knife is the best means of getting rid of the diseased mass. It is quicker, there is less suffering, and I believe it to be no less certain.

Some months ago a man called and asked for a simple cerate to apply to a sore on his lip. I looked at it and said, "That lip needs careful treatment or it will be a serious matter." He left and soon called again, saying he had been to a dentist who had assured him that the trouble could be all overcome by taking out a certain tooth. He took out the tooth; I replied he would soon discover the dentist was in error. Time passed on, the lip getting worse; he returned for treatment; I found he had been a great smoker and had also taken considerable liquor. His blood was in poor condition. So for about four weeks I gave him alterative and tonic treatment. He improved much and began to think there would be no need for an operation; but the trouble, to the initiated, was beginning to show signs of growing malignance. So I set the day to remove the tumor. Dr. Boughton was present to give chloroform. But the man preferred not to take an anesthetic. I injected a few drops of mur. cocaine, four per cent solution, on each side of the tumor, and then cut out a wedge-shaped piece embracing the whole of the indurated mass, which was a little over half an inch at top, the incision running down, both cuts meeting at a point about three-quarters of an inch down the lip. Six strong silk stitches were inserted, bringing the edges snugly together. The cocaine worked well, not a groan was heard, neither did the patient flinch in the least. The wound healed by first intention,

and with the exception of a little congestion, the result of exposure to cold, everything has gone well and the scar is but slight. This is one of three cases I have under close observation. They may return; but comparing the results as between the use of the plaster and the knife, I would say if there is not too much surface involved, use the knife every time.

THOUGHTS ON THE RATIONAL APPLICATION OF MEDICINE.

BY H. T. WEBSTER, M. D.

THE mode of origin of the red blood corpuscles is yet a vexed question. In the embryo there seems a marked similarity between red and white corpuscles as regards their appearance and properties, the only distinction being that of color. Here the red corpuscles are granular, nucleated, exhibit amoeboid movement and multiply by subdivision. Later in fetal life the non-nucleated red corpuscles originate from the cells of connective tissue. In adult life this origin has been observed in the connective tissue of the marrow of bones.

It is not unreasonable to suppose that connective tissue is the breeding-place, so to speak, of the red corpuscles, at least the locality in which they reach maturity during adult life. The white corpuscles probably represent a transitional state of broods of these cells. Histologists record the fact of having observed red corpuscles protruding from white ones while they were moving along the capillaries.

Originating in the connective tissue of the lymphatic glands, the white corpuscles are for a time bathed in a fluid purely nutritious. Entering the blood stream later, their actions are remarkable. Here they exhibit characteristics entirely at variance with those manifested by the red corpuscles, which hurry along with the current as though impelled by some attraction. But the white corpuscles lag, appear to adhere to the walls of the capillaries, and seem to possess an attraction for the surrounding tissues. Closely watched, a white corpuscle after a time is seen to pass through the capillary wall into the connective tissue

—a normal process termed "diapedesis," once supposed to be peculiar to inflammation, but since demonstrated as a vital characteristic.

What is the significance of all this? The lower forms of life present us with many examples of transitional states during which the development of the adult is progressing from embryonic forms. Connective tissue cells have been proven as the origin of red blood corpuscles in certain cases. Connective tissues are liberally supplied with nutritive material and possess a remarkable power of abetting cell proliferation under such conditions as that of inflammation, which proliferation of new elements may fairly be regarded as a normal process exaggerated by the excitement due a hyperæmic condition. Leucocytes may represent broods of red blood corpuscles which, arriving near maturity, are conveyed to the connective tissues and there liberated for complete development, after which they enter the capillaries through the attraction due their new endowment and fulfill their mission of carriers of oxygen and carbon dioxide until aged, and broken up by the liver.

Red corpuscles have been observed to pass through the capillary walls, but that they pass inward during health we have not as yet testimony to affirm.

However, clinical experience seems to indicate that those means which promote activity in the connective tissues are most effective in the correction of anæmia. General faradism, massage, —such measures as these can hardly be excelled in impoverished states of the blood where red corpuscles are lacking. As for medicament, iron often aggravates anæmic states, and is most impotent to bring about favorable changes, though normal processes often restore patients while being drugged by the various ferruginous preparations.

Evidently, a few drugs exert some favorable influence upon the blood-making processes. Agents promoting functional activity of the lymphatic glands must promote the birth of blood corpuscles if here be their place of origin, and remedies favoring activity of the connective tissue cells must further the process if here be where they hibernate until fully developed. Massage and

electricity permeate the tissues and reach the areolar structure directly. Cuprum specifically influences the blood-making organs, though its influence is feeble beside that of the agencies of the electrologist and masseur.

If iron ever becomes a successful remedy in blood-making, it must be after the material doses so commonly employed have been abandoned. Tincture of chloride of iron in ten-drop doses administered in metorrhagia for constringing purposes is capable of perpetuating and increasing the flux. In a fistulous discharge from a suppurating breast with erysipelatous manifestations it may prove a source of aggravation. As long as this remedy has been hugged to the bosom of the common profession as a remedy for erysipelas, it ought to be known that it is comparatively worthless; yet it is still the favorite remedy of a majority of practitioners. It is probably one of the greatest delusions of modern medicine.

From blood-making we pass to tissue regeneration. "The blood is the life," wrote the wise man of antiquity; and this is a fact not to be gainsaid. Good blood-making is essential to tissue-building, but there are other elements concerned in the repairing of parts debilitated by disease.

Suppose a carpenter builds himself a house, and a cyclone comes along after it is finished and whirls it into fragments, injuring in the meantime its owner. Now, suppose that there is no other builder to be had and that the same carpenter in a crippled condition—arms, shoulders and other parts of the body somewhat impaired in their functions—is obliged to build another. The process will evidently be a slow and unsatisfactory one, and when the structure is finished it will be inferior to the former one, even though all the material furnished should be first-class. Suppose, however, this structure is destroyed, but the owner this time escapes injury. He has now somewhat recovered from the effects of the cyclone and is able by extra effort to construct a better building than the last one. He has been improving, gathering strength as it were, and with the same quality of material approaches a little nearer perfection than before, when impairment of his locomotor and prehensile functions unfitted him,

and after he has several times repeated the process he comes quite near the standard of his former excellence before his injury disqualified him for the purpose.

So it is with a part injured by disease. The blood for its regeneration may be of the best quality, but the builder—the plastic principle, the formative force—has been impaired, and though the blood-vessels carry good building material to the part the cellular elements fail to construct good protoplasm from it and an imperfect structure gradually takes the place of that weakened by disease. But the tissues are constantly being broken down and repaired, and the physician can aid this formative force by selecting such agents as specifically influence the affected part to improve its recuperative energies; he can further augment its vitality by the local application of properly selected electrical currents; he can guard the part from undue tension or over-exertion by proper attention to details, and after a time, even though the condition has become chronic, he can effect a renewal of the life of the part—an approach toward, if not a complete recovery, resulting.

But how about such conditions as phthisis, cancer, sarcoma—diseases in which meager promises of recovery are offered? Shall all the efforts of the physician be directed to the renewal of the life of the part? By no means. The great province of the physician is the palliation of unpleasant symptoms. The physician is not always to be a healer; he must see that pain is mitigated, that the pathway of the hopelessly stricken patient is smoothed to the grave. Let him not abandon any case as hopeless, for the diagnostic fallibility of the medical profession is proverbial; but let him bear in mind the propriety of measures tending to his patient's comfort, as well as his permanent recovery.

Pain is a symptom demanding most thoughtful consideration. The careless and heartless practitioner prescribes off-hand; in these cases his opiates lull the patient through an artificial paralysis into a relief of stupor, and he waits for returning consciousness to repeat his narcotic dose if the pain persists, without inquiring carefully into the condition or instituting means for removal of the pain-producing cause.

CORRESPONDENCE.

MR. EDITOR: I perceive by the announcement of the California Eclectic Medical College that they have adopted a three years' course of lectures as a requirement for graduation. I think the Faculty have decided on a wise course. The American School of Medicine and Surgery (the Eclectic) requires a higher standing of their graduates than any other. Homeopathy and Allopathy are but wings of an Eclectic college. The instructions are such that they demand of these graduates a thorough knowledge of all the important remedies used in Allopathy and Homeopathy, thereby enabling their students to practice and counsel with any physician of any school the world over; and I believe the Eclectics are the only ones capable of doing so. Therefore, I cannot see how any college can instruct its students in a shorter time.

Another rule of the institution I think requires serious consideration: that is, the advisability of graduating students in one course of lectures who have attended two courses at some other school.

First teachings and impressions, to an ordinary mind, are apt to be lasting, at least hard to eradicate. At the end of the course such a student is either a Homeopathist or Allopathist still, or he does not know what he is. He may be a blockhead and think that by attending one course in an Eclectic college he may get through easily where he would fail in his own. Such graduates are not desirable.

A student who wishes to become an Eclectic from a knowledge of its principles and a love for the medical school of his country, ought not to object to attending two extra courses of lectures. I know full well that the teachings of the California Eclectic Medical College are very thorough, evidenced by the number of students it receives from abroad. Every session students are to be found in the class either from England, Germany, France or Australia, showing conclusively that the reputation of the American School of Medicine and Surgery is rapidly extending itself throughout the world.

Now that the three years' course has been decided upon, and is being followed, does it not appear that the time has arrived to take some action to protect the graduates of this State? or are prospective students to continue going East and returning with a ten months' diploma in their pockets? I understand the medical laws of Ohio from the year 1890 will require a three years' course of study. I hope before long we shall learn officially, through the JOURNAL, that the Eclectic Medical Examining Board of California has decided not to grant license to any one graduating after the year 1890 unless he can present satisfactory evidence of having attended three courses of lectures delivered in three separate years.

T. D. HALL, M. D., *Oakland, Cal.*

QUITE a *recherche* little affair in the way of a banquet was participated in by members of the Galen Society of California Medical College on the evening of the twenty-sixth of October. Toasts were proposed and responded to in the following order: "Our Professors," Jessie C. Farmer; "Members of Galen Society," Chas. N. Miller; "Gentlemen Physicians," Clara Reid; "Lady Physicians," H. C. West; "Anatomy," Carrie Yetter; "Patients Who Pay," Kate MacRae; "Physiology," T. C. Farrar; "New College," Wm. A. Harvey; "Old College," Dr. Miller No. 2; "Dissecting Room," A. J. Huntsacker; "Country Practitioner," A. G. Smith; "Juniors," Lizzie R. Osborn; "Science of Medicine," Dr. Vesper; "Patients Who Don't Pay," J. C. Stark.

Many of the toasts were responded to in a facetious and brilliant manner, eliciting hearty applause from those present. The festivities were brought to a close at the "wee small hours," and they all dispersed to the old familiar tune of "Home, Sweet Home." The two papers published below were read.

SHOULD THE LADY PHYSICIAN BE A GENERAL PRACTITIONER?

LADY physicians themselves differ materially as to what should be their exact sphere of action; yet the majority will agree that they are not adapted for a general practice.

It must be evident, to the thinking mind, that the refined lady physician would much prefer the attendance of her own

sex, and would naturally shrink from a promiscuous practice among males. Although, in acquiring her medical education, she has had to pass through scenes where *modesty* was necessarily at a low ebb, yet to the outside world she should be, and is still, the modest woman and the lady she was before commencing the study of medicine.

Society and social standing is everything to the true lady, and of course this could not be maintained were she to practice promiscuously among the male element of society. We have only to note the social standing of the woman who is a general practitioner to say at once that she who cares for reputation and character will confine her practice to her own sex. Now, as *modesty* and *social standing* constitute the bulwark of the female character, and, insomuch as they would, to a great extent, be lost sight of by a promiscuous practice, hence to be true to her sex and true to her womanhood the lady physician should refrain from the general practice of medicine.

It is a natural supposition, that a woman studying medicine would pay more attention than the male student to the anatomy, physiology, and hygiene of those parts of the female organism especially concerned in diseases peculiar to the sex. Again, a woman has a more delicate *touch* than a man, and we are taught that this is of great importance in making a diagnostic examination. And, again, the lady patient, suffering from a disease peculiar to her sex, has a great hesitancy, owing to her natural modesty, in going to the male physician for examination and treatment. It is only the desperation arising from long suffering that will cause her to do so. Hence, it follows that the practice of diseases peculiar to the female is pre-eminently the lady physician's domain.

Of course the practice of obstetrics by the ignorant and illiterate *midwife* is greatly to be deplored, but in the hands of the skillful and educated lady physician it would seem to be where it properly belongs. Many a time has life been lost by the employment of an ignorant midwife by women too *modest* to have the male doctor, whereas, had a lady physician been available the midwife would not have been employed and life would no doubt have been saved.

Another objection to a lady being a general practitioner is the fact that duties often arise for which she is physically incapable. For instance, we may mention the reduction of the larger dislocations and fractures where more strength is often required than is possessed by the average woman. Again, if she resided in a country village or town, the hardships of long visits over rough roads and in all kinds of weather would be more than her delicate constitution could stand.

There is another class of cases that it would seem a woman was pre-eminently fitted to treat, namely, diseases of children. Now, in a country location, the same objections might be raised against this as against her being a general practitioner, but in a city practice this would not be the case. The mere fact that women are thrown more with children than men are, makes them better fitted to understand that unspoken language contained in the *expression* of the infant, which is so necessary in successfully combating its ailments. The maternal instinct and love that is present in every woman's breast is also a grand qualification in the treatment of children's diseases.

Now, I think that all will agree with me, that where circumstances permit, the practice of diseases of women and children is the proper sphere for the lady practitioner.

MRS. CLARA L. REID.

SHOULD FEMALE PHYSICIANS TREAT MALE PATIENTS.

ONE of the perplexing questions that will arise for the recent female graduate in medicine to decide, is whether she shall treat her own sex only, or broaden her field of practice by including among her patients those of the opposite sex. She will probably give a good deal of thought to this particular subject, and perhaps decide in her own mind that there are no good reasons why she should not treat men as well as women; but the fear of being considered immodest may deter her from putting into practice these ideas which to her seem right.

The public is not yet aware that a woman M. D. is much above a midwife or a nurse. It does not seem to realize that the

woman's medical education is as complete as her brother practitioner's; that she is required to pass exactly the same examinations and obtain the same percentage in order to receive her diploma as the man; that she is struggling for existence, the same as he, and has chosen the medical profession that she may honorably support herself, and not, as many think, for pure love of her fellow-creatures. The legitimate woman physician is misjudged by the public when it thinks that philanthropy is the motive that prompted her to choose this profession, and not dollars and cents. She may be philanthropic, but in few instances is this the reason why she goes through the weary years of college life and endures the hardships of an active practice.

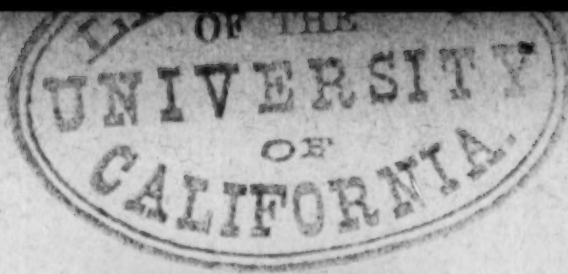
While in college the women study the same branches of medicine as men; dissect bodies whether male or female; attend clinics of either sex, and, in fact, are medical students and not women. To earn a living being one of the main reasons for her adopting the medical profession, then the woman's opportunity of making money, were she to confine herself exclusively to a female practice, would be less than the male physician's, for he has not only his own sex to practice upon but the women also. In other words, after having worked shoulder to shoulder, as it were, with her brother student in college, when she graduates she must be content with a little more than one-half the opportunity of supporting herself that he has to support himself. Her field of labor must be limited to a certain extent, his unlimited in this case.

The female physician must make up her mind to be isolated, socially, to a certain extent. Her life is altogether different from that of the ordinary woman. She has an aim in life and must be capable of enduring the criticism of the public. If in faithfully performing her duty and earning her bread by the means she has been taught, she is called immodest, she must rise superior to such censure. But is it immodest to heal the sick of the sterner sex? Is it particularly unwomanly to write a prescription for dyspepsia, hepatitis, rheumatism, neuralgia, cough, coryza, colic, or for many other diseases to which flesh is heir, if the sufferer from one of these many ills is a man? The female

physician can attend a case of typhoid, dress a mangled hand, remove a tumor, set a fracture, and attend hundreds of ailments, in each case the patient being a man, and yet she may maintain her modesty and womanliness, public opinion to the contrary.

Public opinion is not shocked if during war refined and tender women leave their homes and all to follow the ranks and care for the wounded, sick, dying and dead. The sights these noble women have seen and the duties they have performed would make an ordinary physician shudder. It is not then thought that these things are too revolting for modest women to see and do. Whose memory is more honored to-day than Florence Nightingale's? These army nurses on their return home have received great honors. They have been written about, pictured in magazines, and some of them have received the cross of the Legion of Honor. If then in war these duties which women perform do not unsex them, then surely to prescribe for a man during peace will not have this deplorable effect on the female attendant. But few women will take diseases peculiar to men to treat. Were the number of male and female practitioners equal, and the men then treated female diseases, it might be asked why women should not treat diseases peculiar to men as well as the men treat those of women. But as it is there are few women physicians compared with the men, and it has been and is a necessity that men treat women for these diseases. Some women make a specialty of diseases of the eye, ear and throat. If a man with a cataract came to one of these, is there any just reason why she should not operate on him? The same with lung specialists, specialists on nervous diseases, etc. They cannot, should not, turn away their patient because he is a man and they are women. True, energetic, ambitious physicians, be they men or women, are not going to have their possibilities limited by the boundary of popular opinion. The true physician should be absorbed in his or her profession. A good woman will not lose her modesty nor become unsexed by helping to alleviate the sufferings of anyone, man or woman; and if by hard toil and other expenditure of time and money she becomes able to battle with disease successfully, let her attack that disease, no matter if a man is its victim.

JESSIE C. FARMER.



PATHO-BIOLOGICAL LABORATORY,
STATE UNIVERSITY OF NEBRASKA, LINCOLN,
October 24, 1888. }

EDITOR CALIFORNIA MEDICAL JOURNAL—*Dear Sir:* The intense need of a national laboratory at Washington for the study of the contagious and infectious diseases of human and animal life must have been imminent to thinking men of the medical profession for years, as it has been to me. After much thought and correspondence with our best Representatives in Congress, the following bill has been drafted for presentation at the coming session. Will you carefully give it editorial consideration and suggest any improvements that may occur to you, and publish the same in one or more issues of your journal, sending me marked copies of the same. You will observe that its aim is stimulus to all and control over all the work done in the country, with an opportunity for volunteer workers, the country to have the benefits. I would respectfully call your attention to the following points:—

1. The bill divides the work into two distinct divisions, human and animal diseases, and thus at once creates a point of noble rivalry between them.

2. It places it in charge of the Surgeon-General of the Marine Hospital Services, thus supplying him with the means of acquiring a body of competent workers, with whom he may become acquainted beforehand.

3. It gives him the world to choose from for directors of the two institutes, while it limits the selection of assistants to this country, thus providing the way of Americans of ability to rise to chief positions.

4. It gives a chemist to each institute, thus keeping up the stimulating rivalry.

5. It opens the way to independent workers, and thus increases the number, while the country has the benefit of the results.

6. It opens the way for students, thus providing the means for boards of health and medical schools to obtain competent men, and stimulating research in all parts of the country.

7. It tends to make our national capital a center of learning and culture, which should be the ambition of every citizen.

Trusting, my dear sir, you will lend the object all your support and influence, I remain your obedient servant,

FRANK S. BILLINGS, *Director*.

A BILL

For the establishment of a national patho-biological laboratory, for study and investigation into the nature and causes of contagious and infectious diseases which threaten and endanger the health of the people and the live-stock interests of the country.

Be it enacted by the Senate and the House of Representatives of the United States of America, in Congress assembled:—

That for the purpose of the better protection of the health of the people of the United States from the ravages of contagious, infectious and malarial diseases, and for the preservation and protection of the great live-stock interests of the country from the decimating devastations of pestiferous diseases of a similar nature, and for the more complete elucidation of the relation existing between many diseases of our domestic animals, and the life and health of human beings whose business calls them into intimate relations with them, and of the welfare of the public as consumers of animal food or animal products, there shall be established at Washington, in the District of Columbia, and the United States of America, a laboratory for the purpose of making a continuous and scientific study into the causes and nature of the classes of disease herein mentioned, and of all subjects connected therewith, bearing either upon the public health or animal economies of the country, and that said laboratory be known as the Patho-biological Laboratory of the United States of America.

It is further enacted that the general supervision and control of said patho-biological laboratory shall be in the hands of the Surgeon-General of the Marine Hospital and Quarantine Service of the Government of the United States; that the said Surgeon-General shall at the completion of the buildings and grounds herein provided for, appoint two distinct and independent directors, who shall be the heads of two distinct and independent departments of investigation, and who shall be known respectively as the Director of the Hunano-patho-biological, and the Zoo-patho-biological Institutes of the Patho-biological Laboratory of the United States.

The directors of the institutes named above shall be competent and skilled patho-bacteriologists, the one in human, the other in animal diseases, and shall, respectively, be graduates from a thoroughly organized and world-accredited medical and veterinary school, college, or department of some university, and shall have both been engaged in, and have published in some accredited journal or report, investigations which have gained them each reputation in the medical-scientific world, and have demonstrated their fitness for the positions and responsibilities herein provided for.

The salaries of the directors of the institutions above mentioned shall be five thousand dollars (\$5,000) per annum.

The said Surgeon-General, with and by the advice and consent of the directors of the institutes named, shall also appoint an assistant to each at a salary of twenty-five hundred dollars (\$2,500) per annum, respectively; the one assistant to be a creditably graduated doctor of medicine, and the other a doctor of veterinary medicine, both of whom shall be citizens of the United States, and shall have done creditable work in the field of patho-bacteriological investigation.

The directors of the institute named shall appoint, with and by the consent of the Surgeon-General of the United States Marine Hospital Service, such other assistants and servants as shall be necessary to carry on the work herein provided for.

The said Surgeon-General shall also appoint to each of the institutes named a competent chemist, each of whom shall be fully equal to conducting investigations in search of the true character and value of the ptomaines or toxius produced in the evolution of micro-organismal life, and who shall have previously distinguished themselves in this line of research. The salary of said chemists shall be five thousand dollars (\$5,000) each per annum. The Surgeon-General aforesaid is also authorized to employ such assistants and servants for the aid of the said chemists as shall be necessary to the faithful and thorough conducting of their investigations.

The salaries of the persons herein named in connection with the work of the patho-biological laboratory of the United States shall be paid out of the funds in the treasury upon warrants drawn by the said Surgeon-General, countersigned by the Secretary of the Treasury Department of the United States. It is further provided that, in order to stimulate and encourage original research into the cause and nature of the classes of disease herein mentioned, the said Surgeon-General is hereby authorized to offer the free use of such rooms and appurtenances as shall be provided therefor in the said laboratory to a limited number of

such citizens of the United States as may volunteer their services at their own expense, and who are known to the said Surgeon-General to have been creditable graduates of an honorable veterinary or medical school or college, and to have distinguished themselves by original research in the lines of work herein provided for, the necessary room, materials and appliances to be supplied by the officials of said laboratory. Said voluntary workers shall agree, in writing, with the said Surgeon-General, to accept two young medical or veterinary students of American schools or colleges, to be selected by the said Surgeon-General, as assistants and students, and to instruct them in the lines of work they may be engaged upon. Such students must be at their own expense, except as to the instruments and implements necessary to work with. The said volunteer investigators must furthermore agree, in writing, to continue any given series of investigations until completed, to the satisfaction of the said Surgeon-General, unless otherwise excused thereby, and must further agree to engage upon any special line of research that may be deemed necessary by the said Surgeon-General, or the director of the institute of this laboratory, to which they may have been detailed. They must further agree that all the results and benefits of any work performed by them in any department of this laboratory shall become the property of the Government of the United States of America, and be reported in a full and exact manner for publication in the reports of the same. With and by the consent of the director of the institute of this laboratory, in which such a volunteer may be working, and with the written agreement of the Surgeon-General aforesaid, such volunteer investigators may have the privilege of publishing advance reports of their work in the medical or scientific journals of this country. It is further provided that the sum of five hundred and fifty thousand dollars (\$500,000) be hereby appropriated, from funds in the Treasury of the United States, for the purpose of purchasing the necessary land in the city of Washington, and for grading and fencing the same, and for the erection of the necessary buildings thereon and the equipment of the same, in accordance with the uses herein provided for, to wit:—

For the purchase, grading and fencing the land, one hundred and fifty thousand dollars (\$150,000). To a laboratory building, two hundred thousand dollars (\$200,000).

The necessary apparatus and equipment of the same, one hundred thousand dollars (\$100,000). For stables, pens, cages, etc., and residences for grooms and servants, one hundred thousand dollars (\$100,000).

It is further provided that the Secretary of the Treasury of the

United States, the Secretary of Agriculture and the Surgeon-General of the Marine Hospital Service shall constitute the Board of Trustees and Building and Purchasing Committee of the Patho-biological Laboratory of the United States, and that the persons named are hereby empowered to purchase a location, secure the necessary plans and build and equip the said institution in the manner herein provided for and to draw the necessary warrants for the payment of the same in accordance with the letter of this act.

NOTICE.

THE Eclectic Medical Society of the State of California will hold its annual meeting for 1888 in San Francisco, California, December 13 and 14, Thursday and Friday. It will be noticed that but few members have been assigned subjects for essays. The reasons for this are, that in case many have duties to perform none deem it necessary to make preparation, and should many of them prepare themselves only a small proportion could be heard.

Subjects have been chosen for discussion mostly instead of simply for essays. These subjects give great scope for investigation and discussion.

The individuals nominated will be expected to bring out the salient points of interest, and each member be just as well prepared to enter into a discussion of the subject. In this way the meeting may be rendered both interesting and profitable. So far correspondence shows that attendance will be good. Let every member come prepared to enjoy a banquet where we may partake of a "feast of reason and a flow of soul."

SUBJECTS ASSIGNED.

1. "Ovariectomy," Dr. D. Maclean.
2. "Does Irrigation Induce Malaria?" Dr. A. B. Butler.
3. "Why Does Faradism Relieve Nervous Prostration?" Dr. H. T. Webster.
4. "Does Anger, Maniacal Excitement or Alcoholism Increase Muscular Power or Energy?" Dr. Geo. G. Gere.
5. "A Comparison of the Methods of Treating Eczema by the Allopathist, by the Homeopathist and Eclectic," Dr. A. W. Bixby.

6. "Local Anesthesia," Dr. W. C. Harding.
7. "Diseases of the Rectum," Dr. J. W. Hamilton.
8. "Visceral Surgery," Dr. M. V. Yancey.
9. "Do the Oils and Fats Build Adipose Tissue or Brain and Nerve Tissue in the Animal Economy," Dr. Gates.
10. "What Comprises a Complete List of Remedies Possessing a Tissue Affinity for the Eye," by John Fearn, M. D.

For evening discussion—

"What Are the Best Means of Popularizing the Methods of the Eclectic School on the Pacific Coast?" by T. D. Hall, M. D.

DR. F. CORNWALL, *Pres.*

M. H. LOGAN, *Sec.*

SELECTIONS.

HOW TO TREAT NASO-PHARYNGEAL CATARRH.

It seems that a disease which is so uniformly prevalent as naso-pharyngeal catarrh should have some well-recognized method of treatment. Intermittent fever, dysentery, and other diseases of frequent occurrence have some general form of treatment, which, according to experience, is considered the orthodox treatment; this observation is as true of the common catarrhal affections of the nose and throat as it is of intermittent fever and dysentery.

The diversified methods of treatment adopted by the profession, indicate they are not a unit upon this question, and the unanimous verdict of the public, upon whom these different methods are practiced, is, that it is a failure and not worth the money it costs. Some physicians recommend a treatment with hesitation and doubt, but are careful not to use it upon themselves. This causes the patient to distrust the competency of the physician, and the former feels that he has been forsaken, and wisely concludes that treatment is useless, which of course it is under the circumstances.

Heretofore the methods of treatment used were based upon er-

roneous conceptions of the character of the disease; hence the many failures. A form of treatment that yields good results in at least 95 per cent of the cases treated, may be regarded as eminently successful; such is my success, extending over many years.

The etiology and pathology of the disease we will omit, and speak, in this paper, of the two forms of catarrh and their treatment. In the hypertrophic forms of catarrh there is the so-called inflammation, with thickening of the mucous membrane, increased sensibility, the secretion is profuse, semi-transparent or purulent, and tenacious, and sometimes more or less pain.

The first thing necessary is to cleanse the parts of the adherent mucus, examining from time to time with the rhinoscope to ascertain if the surfaces are thoroughly cleansed. For this purpose, if the mucus is not too tenacious, I use the mixture which is used for the medication. Very tenacious mucus is removed by spraying a limited amount of the following solution at blood heat upon the surface covered:—

R Sodium chloride, $\frac{1}{2}$ drachm.
 Sodium bi-carbonate, $\frac{1}{2}$ drachm.
 Glycerine, 3 drachms.
 Listerine, 4 drachms.
 Aq., q. s. ad., 4 ounces.

It is important this cleansing must be done carefully with as little irritation as possible. It should be sprayed up behind the soft palate, and anteriorly into the nose. The patient should not gag or retch from the use of the instrument or remedies. If the parts can be cleansed without the use of the cleansing solution, it is best to do so. In such cases use only the medication, for while cleansing, the parts are medicated and the patient is quickly and easily treated. However, after using the cleansing solution, use the medication slightly warmed over a lamp or gas jet.

R Oil vaseline, 2 ounces.
 Eucalyptol (Sanders & Son), 3 minims.

In the atrophic form of catarrh there is the so-called inflammation, with thinning of the mucous membrane and sub-mucous tissues, sensibility diminished, secretion profuse, tenacious, incrusting upon the affected surfaces, and is dislodged with difficulty

In these cases the cleansing solution given above is indispensable, and used with the same care and caution until the surfaces are entirely cleansed. After which use the medication composed of

R Oil vaseline, 2 ounces.
 Oil wintergreen, 10 minims.
 Resorcine, 5 grains.

All these solutions should be warmed to blood heat before using, and applied gently and carefully, spraying the parts. The application should be made once or twice daily for a while, then less frequent. After the first month's office treatment it is best to give the patient a home treatment which he can use at any time desired. For this purpose I have a device consisting of a "U"-shaped metal tube bearing a rubber cork, and placed in a bottle holding the fluid vaseline preparation as above and connected with a rubber bulb. In the metal tube there is a series of small holes by which the volume of spray is regulated. With this the patient can treat himself quite well, and in many cases it is all that is required to effect a cure.

I have used the above treatment in patients of all ages for years, and can testify as to its efficacy. In mild cases in children the fluid vaseline alone is often sufficient to effect a cure, sprayed into the nose anteriorly. In older persons the treatment is necessarily long-continued, for it must be remembered that it is a chronic disease and requires chronic treatment; but relief is certain after the first few days' use of the remedies. I rely very much upon the fluid vaseline as a curative agent in the treatment of all catarrhal affections.—*N. R. Gordon, M. D., in Peoria Medical Monthly.*

A NEW AND RELIABLE REMEDY FOR COCYGODYNIA AND PRURITUS ANI.

I HAVE, for reasons I do not care to speak of, regarded this disease as purely neurotic. I have treated it with the Faradic current. One treatment produces immediate relief; a few treatments cure it. Three cells are sufficient; time, five minutes. The frequency of application depends upon the return of pain. The anode is placed over the sacrum and the cathode in the

vagina or rectum, or over the sphincter ani muscle. This treatment, so far as I know, is original with myself.

Much has been written of late concerning the treatment of pruritus ani. I desire to add my own suggestion. The best remedy I have ever found is the galvanic current. The quantity required need not exceed five milliamperes; the time of application, five minutes. The relief is immediate, and the application once or twice daily is quickly curative. The anode is placed over the perineum, or base of the scrotum, and the cathode against the sphincter ani, or, if required, within its grasp, bringing all the pruritic surfaces between the poles. I claim to be the first, so far as I know, to suggest this remedy for the treatment of this disease. I will ere long have more to say of it.—*R. Stansbury Sutton, M. D., in Philadelphia Medical and Surgical Reporter.*

OIL OF PEPPERMINT AS AN ANTISEPTIC.

W. L. BRADDON has instituted extensive experiments to discover if possible an efficient microbicide which would be sufficiently harmless to human beings to answer for internal use. In communication to the *Lancet* the author reports that these experiments were carried out, first under conditions as nearly as possible identical with those which obtain with wounds, etc., the relative powers of carbolic acid, iodine, iodoform, corrosive sublimate, and peppermint, being compared. The observer considers the complete superiority of the latter completely proved, and has tried its powers in actual practice "with most excellent results." He adds, "Absolutely harmless to the system in the largest doses, easily attainable, and readily prepared, oil of peppermint thus forms the best, safest, and most agreeable of all known antiseptics." Trials of the value of the oil in phthisis "indubitably showed that it produces when inhaled no ill, but only beneficial effects, even in the latest stages of galloping consumption checks it earlier in its progress, and sometimes completely cures." In two cases of diphtheria it is said to have also produced entire and rapid recovery.

DANGERS FROM PROTRACTED INHALATION OF ETHER.

W. GILL WYLIE, M. D., in the *Medical Record*, of March 31, 1888, presented to the profession a summary of a year's work in abdominal surgery. The record is brilliant; out of forty-one operations for the removal of the uterine appendages but one death occurred, and that was from acute interstitial nephritis. Of seventeen ovariectomies, one died from suppression of urine, on the fourth day. The autopsy revealed chronic and acute diffused nephritis, with cirrhosis of the liver. One case of suprapubic hysterectomy died of exhaustion, while two laparotomies, one for extra-uterine pregnancy, and the other for septic pelvic abscess, resulted fatally.

From the foregoing it appears that in two of the cases death was caused by inflammation of the kidneys. Dr. Wylie attributes the death of one of the patients to prolonged use of ether in the operation. This emphasizes the known dangers of ether inhalation, particularly in prolonged operation, in persons suffering from chronic interstitial nephritis. For years ether has been considered in the United States the anesthetic *par excellence* so far as safety is considered. Those appalling accidents in which a patient dies on the operating table were comparatively infrequent, and the *mortality* of ether as compared with chloroform was roughly estimated at from one to fifteen. The *nexus* between kidney complications and the inhalation of ether has been too often overlooked, and yet the records show many fatalities, in which the findings at the *post-mortem* table are not different from those in Dr. Wylie's cases. It is possible that, could the records be made up completely, the mortality from ether and chloroform in prolonged operations would vary less.

The practical lesson is that we should *never*, in such cases, administer an anæsthetic without first carefully examining the heart and urine. The latter should be especially examined for traces of albumen; but of more importance than that is the estimation of the total solids excreted by the urine. Of course tubercasts, or other evidence of gross kidney lesion, should at once

contra-indicate the use of ether. The estimation of the quantity and solids of the urine furnishes the true index of the integrity of the renal structures and of their capacity to bear any added strain.

It may be argued that this is a troublesome and complicated procedure. But in these days when the mortality from surgical operations has reached such a diminishing point, the proverbial "one chance in a hundred" cannot afford to be missed by the enterprising surgeon.

Pneumonia is a sequela of ether inhalation by no means infrequent, and one of those which readily escape estimation in tables illustrating the comparative safety of different anæsthetics.

—*Medical Journal and Examiner.*

SLIPPERY ELM BARK AND TAPE-WORM.

THE normal habitat of this obnoxious parasite in man is the small intestine, and there, when fully developed, his wormship flourishes under all normal and abnormal conditions. His spontaneous expulsion entire rarely, if ever, occurs, and each and every joint, when matured, contains sexual organs, and is capable within itself of reproduction of the species *ad infinitum*. Whether tænia are capable of producing febrile conditions only, or serious disease also, is, I believe, undecided; but their presence always produces considerable intestinal irritation, and it is a noticeable fact that persons affected with tænia seldom enjoy health, the prominent symptoms being generally a voracious appetite, with loss of flesh. The only true diagnostic symptom, however, is the presence of joints.

W. B. consulted me April 1, complaining of intestinal distress, disturbed sleep, voracious appetite and loss of flesh, and, as he termed it, "pieces of gristle in his stools." An examination of his case revealed the existence of tænia. I prescribed the following, which I consider a specific for the cure of tænia:—

R Pulv. slippery elm bark, ℥iv.
Water, Oj.

The patient to fast two days; the evening of the second day to

take a purgative dose of castor-oil sufficient to move the bowels the following morning, and while still fasting take one-half of the medicine, and in half an hour the remaining half along with the full dose of castor-oil.

The entire parasite in a mass was expelled in one hour after the last dose of medicine, measuring forty feet in length. The pulverized slippery elm bark, when administered as directed, will cure every case of tænia extant, and I advise all Eclectics who have been disappointed in their cases with the usual remedies, to give the slippery elm bark a trial, as I am convinced from experience that the cure will be speedy and positive. The remedy can be administered according to the age and condition of patient in all cases. The patient fasting two days, the worm becomes very hungry, so when the emollient of slippery elm bark is taken, it makes the coats so slick that when the tænia lets go to feed, he cannot catch hold again, and he slips into another world to be preserved in alcohol.—*J. A. Mitchell, in Eclectic Medical Journal.*

LEONTIN.

SOME months since I reported a number of cases which I had treated with leontin. Since that time I have had quite a large experience with this new remedy, and I feel constrained to give my brother doctors the benefit of this experience.

Within these months I have treated four cases of tardy establishment of the menstrual function. These girls ranged in age from fourteen to sixteen years; and while most of them experienced the molyma at monthly intervals, there failed to be any "show." They had been under the treatment of a very intelligent old-school physician, who, under stress of long habit and ancient custom, had saturated their systems with different iron preparations. In a conversation with him I asked him if he had ever treated a case of functional amenorrhea in which iron *undoubtedly* effected a cure. His answer was characteristic, and it furnishes an index to his frank and honest character. Said he, "Doctor, I am not *sure* that I ever effected a cure with *any* medicine, excepting, perhaps, quinine. I have given iron in a

number of amenorrheal cases in which regularity was finally established. One thing is certain, whatever good it does, it will injure the teeth and impair digestion, if its use is persisted in long. I wish we had a real emmenagogue."

I talked to him about the girls; told him I had been giving them leontin; that by a queer coincidence their monthlies came on nearly simultaneously; and that each one of them had taken the same amount of medicine and for the same length of time. The doctor, although a warm personal friend, and full of confidence in my veracity, looked as blank as space for a minute, and with an abortive effort to conceal his incredulity, said: "Well, I'll be d—d!" The relevancy of the remark, dear reader, depends upon certain psychological principles which it is needless to discuss here. The doctor has since procured some of the leontin, and is profuse in its praise. Furthermore, he has borrowed my "Scudder's Specific Medication," and he is enormously tickled with it. There is imminent danger of his becoming a convert to specific medication. Doctor D., an old-school physician, asked me the other day what I had been doing to Dr. G., as his theories and methods had undergone such a wonderful change. He intimated darkly that I must have "castrated or vaccinated him, or something," the change was so marked. I simply smiled with sardonic significance.

To the incipient ladies above alluded to, I gave the remedy as follows:—

R Lloyd's leontin, 3 j.
 Aqua pura, 3 iv.

M. Sig.—A teaspoonful four times a day.

The use of this for two weeks had the desired effect. I have also used it recently in a number of cases of suppressed menstruation with the best results. It has thus far failed me in one obstinate case. I am not acute enough as a diagnostician to know, without a physical examination, what the deuce is the matter. I have thought of atresia, and other congenital and pathological atrocities, and before long, unless that girl's courses come on, I shall sequester my modesty and insist upon an examination. She has never menstruated yet.

I am using it, associated with viburnum, in two cases of dysmenorrhea. The effect, so far, is good, but cure is not yet completed. The nods of science, experiment, and common sense, naturally suggest this combination as capital. Will report further in the contiguous by and by.

We have had a regular Niagara of *infantinity* in our town lately. Have attended nine women myself within six days—*i. e.*, a baby and one-half per day. In the last three I used leontin as a prompter, as suggested by Dr. Starner. The medicine, if it was *it*, pleased me immeasurably, for the women got along as I never before saw others do under similar conditions. Would be glad to hear from others on the subject.—*W. C. Cooper, M. D., in Eclectic Medical Journal.*

CHRONIC INTERSTITIAL NEPHRITIS, OR CHRONICALLY CONTRACTED KIDNEY; RENAL CIRRHOSIS.

THE gradually extending view that the condition known as chronic interstitial nephritis is a part of a general process involving the vascular system of the entire organism, and especially the heart walls and kidney vessels, renders the present a suitable time for discussing the subject. For some time past it has been generally thought that the morbid anatomy of the several varieties of so-called Bright's disease or Bright's diseases was pretty well determined. And this may be regarded as true. On the other hand, the etiology of many cases, and especially of a certain number of cases of contracted kidney, has remained obscure, while it has been felt too, that of late little advance has been made in treatment. This, even if correct, would still be in accord with experience in other diseases. For while a determination of the exact morbid anatomy helps us to an understanding of the true nature of a disease, and thence to a certain extent to a correct treatment, it must be admitted that more aids to treatment of disease as well as to its prevention have come with a knowledge of its exact causation. Further, as our knowledge of the exact nature of kidney affections has increased, certain

methods of treatment which experience had already shown to be of doubtful efficacy, have been abandoned because plainly irrational, while a fuller recognition of the natural tendency to repair has robbed other remedies of any reputation they may have had. Hence it has come to pass, even, that in the minds of some the treatment of Bright's disease is an opprobrium on medicine. On the other hand, while it must be admitted that in a certain and even large proportion of cases, it is impossible to restore the original normal structure of the kidney, I know of few incurable diseases in which a judicious treatment is followed by such satisfactory results in averting unfavorable symptoms and complications, whose continued presence must be fatal to the patient.

As to the morbid anatomy of the contracted kidney, it is well known that the organ is a small one, although the amount of contraction varies greatly. The capsule is very adherent, dragging when removed a small amount of the tubular substance with it. The kidney is generally harder than in health and dark-red in color, and uneven or granular on its surface, whence the term red granular kidney, which has been applied to it, although the degree of granulation also varies greatly, being in some instances scarcely appreciable, while in others the term is a very apt one. Cysts with transparent contents and resembling little blisters, varying in size from a mere point to a walnut, are often present, but the smaller are more common. On section the wasting is seen to be mainly restricted to the cortex, which is narrower than in health, sometimes reduced to a mere line in thickness. The same cysts are often seen scattered through the cut surface, and are not altogether confined to the cortex.

Thin sections examined by the microscope exhibit an evident destruction of the tubules of the cortex, which are narrowed, bereft of their epithelium in places, and even totally obliterated; segments of tubules, unduly twisted and detached, are often seen. Malpighian bodies are also found detached and in various degrees of destruction. Everywhere there is an overgrowth of fibrous tissue, and in cases sufficiently advanced it is manifest that it is at the expense of the tubules and is apparently responsible for their destruction. In less advanced stages this overgrowth is

not so extensive, and some careful searching may be necessary to satisfy one's self of its presence, but generally when not easily discovered elsewhere it may be seen in concentric layers about the glomerules.

If now we seek an arteriole in the kidney, we find its walls are thickened, sometimes almost to obliteration of its lumen. Unfortunately the results of investigation as to the exact nature of this thickening are not quite uniform. Dr. George Johnson originally discovered it and published that it was the result of hypertrophy of the middle or muscular coat, to which it was confined. More recently, however, he announced that the intima was also involved, being represented by the inner longitudinal layer of thickening. Dr. Johnson's original observations were made many years ago, when microscopic methods were not so refined as they are at the present day; but in more recent studies of stained sections of granular kidneys made for him by Dr. Heneage Gibbs, he has come to the conclusion that it is manifest that the thickening of the intima in cases of granular kidney, is caused by an increase of the connective tissue between the elastic and endothelial layers, and that it is conservative or physiological and not inflammatory; its probable "result and purpose" being to strengthen the arterioles, in their longitudinal direction, and enabling them better to resist the strain and the resulting tendencies to elongation to which they are subjected by the impulse of the hypertrophied heart. He regards this thickening of the arteriole walls of the kidney to be due to the continuous contraction to which the vessels are subjected under vaso-motor regulation to diminish the blood supply and thus make it commensurate with the diminished requirements of the gland, as it gradually contracts and needs less blood. In a typical example of granular kidney, says Johnson, "every renal artery is seen to have undergone the same change, and *all* the arteries to an almost equal extent." The condition also develops as the disease progresses.

In common with others at the present day, Dr. Johnson finds also, that not only are the walls of the renal arteries thickened, but that the same change is found in every tissue and organ of



the body. In these, however, he claims that the thickening of the *intima* is not present, but in addition to that in the muscular wall is found a thickening of the *tunica adventitia* to about the same extent as the overgrowth of the intima in the renal arterioles. The thickening of these vessels he ascribes to a different cause, the resistance, through the vaso-motor nerves, of the minute arteries to the reception of the impure blood sooner or later engendered in this disease.

I pass over, because they have failed to receive confirmation, the observations of Gull and Sutton, who also found thickening of the arteriole walls of the system at large, including the kidney, and ascribed it to a fibroid transformation which they called "arterio-capillary fibrosis."

Recently Dr. Arthur V. Meigs has made some very careful examinations of the arteries and veins in Bright's disease, and has found a positive and unmistakable change in the intima; but while he has found arteries of which "it could be said that the middle coat was unduly thick, and again others in regard to the state of which there might be dispute," in most instances he has "failed to find an increase so that its existence could be considered to be beyond doubt." The alteration found by Dr. Meigs in the intima was irregular rather than uniform, contrasting strongly in this respect with the uniform thickening of the intima described by Johnson. The condition is a cellular hyperplasia, and corresponds in the various forms and stages with the atheromatous change as described in text-books; in a word, chronic endarteritis. His studies were made upon sections of the brain, spinal cord, lungs, heart, liver, spleen and kidneys, and in various of the larger arteries and veins, and in all of them except the spinal cord, as to which he does not regard his studies having been sufficiently numerous or conclusive; he found quite constantly this irregular outgrowth and thickening of the intima, in some instances almost to the degree of obliteration. Dr. Meigs also found similar, but less marked, changes in the veins.

Since reading Dr. Meigs' paper, I have re-examined some of my own sections of contracted kidney, and find with great uniformity the thickening alluded to residing in both the intima

and media. That of the intima is generally irregular and uneven and cellular, corresponding in all respects with Dr. Meigs' drawings, but that in the media seemed to be a true overgrowth of muscular fiber cells rather than inflammatory infiltration. The observations of Grainger Stewart, repeated in his recent volume on Albuminuria, and Dickinson, also attest a true hypertrophy of the muscular coat, as do those also of German and French observers.

As constant as the vascular changes in renal cirrhosis is hypertrophy of the left ventricle, which in my experience is at first pure and uncomplicated. As the disease progresses there is often slight thickening of the valve flaps and the auricular ventricular orifices may become insufficient from the dilatation, which is gradually added to the hypertrophy. More extensive valvular changes are not common, nor is there degeneration of the heart muscle until the disease becomes advanced, when it is probably brought about by interference with the circulation in the coronary arteries due to the thickening of the intima described.

While Dr. Meigs' observations have been careful and accurate, I can hardly consider him fortunate in the selection of the cases whence he made his preparations. Neither was a case of typical renal cirrhosis, both being instances of parenchymatous inflammation. One in a man of 54 was accompanied by typical aortic disease with regurgitation and brown atrophy of the heart, without any symptoms pointing to involvement of the kidneys, except at first a trace of albumin in the urine, which was without casts and from which the albumin, also, soon disappeared never to return. In the second case, that of a man 51 years old, there was also aortic disease as shown in "calcareous deposit in the valve flaps" and at the base of the aorta, hypertrophy of the heart with brown atrophy, constant albuminuria but no casts. There were also dropsy and orthopnoea, and death with great suffering. Under the circumstances it is impossible to deny that the cardiac hypertrophy was the result of aortic disease, which was part and parcel of the endarteritis, the cardiac hypertrophy being secondary to both; in other words, it is difficult to say with certainty which condition preceded, the cardiac or renal. Observations should

be made upon cases of pure renal cirrhosis with hypertrophy without valvular disease, although it is generally acknowledged that the cardiac and vascular changes may occur in any form of kidney disease of sufficient duration.

The etiology of renal cirrhosis has acquired increased importance of late, because, as intimated at the opening of this paper, there seems to be a growing belief that it is a part of a general condition, involving the vascular system throughout the body, including the kidney, extending to the interstitial tissue of that organ. This view is justified by a consideration of some of the better-determined causes, as well as the anatomical condition of the blood-vessels. Thus the poison of gout, whatever it may be, is a well-recognized cause of endarteritis. Scarcely an individual lives who is the subject of gout and has attained the age of 50, who has not also interstitial nephritis. Again, there are lead poisoning, syphilis and rheumatism, all of which are known to produce changes in the intima of the general vessels. Alcohol, another cause of chronic interstitial nephritis, also produces atheroma, while the frequent association of interstitial nephritis with the excessive consumption of meat and other nitrogenous food—in a word, what is called *free living*, would go to show that it is capable of producing interstitial nephritis, independent of the simultaneous use of alcohol in its various shapes, although it must be admitted that these two often go together.

While I am disposed to consider the changes of the intima which are essentially inflammatory as a result of the irritation of the poison, I am unable to agree with Dr. Meigs in the belief that the same explanation holds good of the hypertrophy of the heart and the muscular coat. That the changes in the intima are the changes of chronic endarteritis, I think there can be little doubt. In this respect Dr. Meigs is right. No overgrowth of connective tissue which the pathologist ever encounters is conservative in the sense claimed by Dr. Johnson, although it may for a time contribute to the strength of the blood-vessel, just as the hyperplastic connective tissue in the wall of the aneurism helps for a time to resist the bursting of the sack. In aneurism its formation is irritative, reactive, the offender being encroaching

blood as the coats yield to its pressure. So the overgrowth in the intima in renal disease is the result of inflammation produced by irritating substances in the blood, whatever these may be.

On the other hand, the thickened middle or muscular coat I regard as a true hypertrophy. It undoubtedly exists in the kidney, at least, and its nature is unmistakable. Such muscular overgrowths can only occur here, as elsewhere, as the result of increased function, and must be conservative. How this increased functional activity is brought about we may not be in a position to decide with certainty, but since the muscular tissue of the heart and that of the vessels always co-operate in health, it is reasonable to suppose that in disease what produces an overgrowth of one is responsible for it in the other. It is not impossible, as claimed by Johnson, that in the kidney it is contributed to by a tonic contraction of the muscular coat occurring *pari-passu* with the gradual reduction in the size of the organ, its object being to diminish the blood supply proportionately to the diminished size of the organ. This is brought about by the vaso-motor system of nerves precisely as the quantity of blood to any other gland, as the salivary, is regulated by the demand of its glandular substance for blood, the only point of difference being that in the case in point the demand of the gland cells is less, because of their destruction, and therefore permanent. Of the other explanations of the vessel wall thickening and cardiac hypertrophy, to all of which there are objections, I will only allude to that of Da Costa and Longstreth, who "locate as most likely the original starting-point of the alteration alike of the vessels and of the heart muscle, in the nervous ganglia and in the parts of the nervous system controlling the nutrition of these textures," in which they have found structural changes. The well-merited reputation of these observers demands a repetition of their work, which, so far as I know, has not been made.—
James Tyson, M. D., in University Medical Magazine.

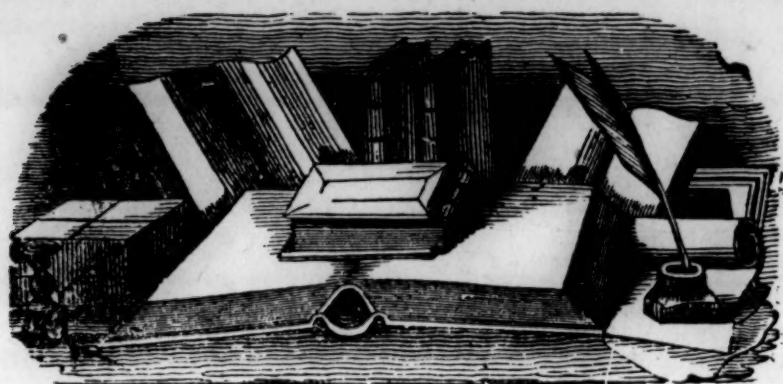
(To be continued.)

DIAGNOSIS OF PENETRATING WOUNDS OF THE INTESTINES.

ONE of the most striking results of the Cincinnati meeting of the American Medical Association was the practical demonstration of a correct diagnosis of penetrating wounds of the intestines, by Prof. N. Senn, M. D., who has been giving particular study to abdominal surgery in the recent past. Although, according to Trelat, the chances are ninety-seven in a hundred that the bowel is penetrated when the abdominal wall is, yet the satisfactory knowledge, beyond the shadow of a doubt, that penetration of the bowel has occurred will do much toward still further developing, and giving even better results to the "American idea" in these cases.

Professor Senn's method, which is very satisfactorily and practically demonstrated, is by the rectal administration of enemata of hydrogen gas, and the insertion of a glass or other tube into the opening in the abdominal cavity, to the outer end of which, after a few moments, is placed a lighted taper. The ignition of the gas, if it escapes by the tube, is indubitable evidence of a solution of continuity at some part of the intestinal walls. The importance of an immediate diagnosis in these cases, the ready facility by which hydrogen can be generated in almost any locality, its harmlessness to any part of the animal economy, and the readiness by which an apparatus can be devised with even the rubber tubing of an ordinary enema syringe and a bit of glass tubing or a pipe stem, all render this one of the most important developments in recent surgery.

That it was received with the heartiest approbation by leading surgeons in attendance goes without saying, and that it will add new laurels to an able, earnest, patient, and progressive worker is unquestioned, and he will take his stand alongside of Sims, McDowell, Emmett, and other original thinkers, by reason of his presentation of "rectal insufflation of hydrogen gas as an infallible diagnostic measure in ascertaining the existence of visceral injury of the gastro-intestinal canal in penetrating wounds of the abdomen.—*Southern Practitioner*.



EDITORIAL.

Principles of Selection.—The selection of remedies for diseased states is a subject which may be profitably discussed, for it is one requiring much thought and study in order that the highest excellence may be attained in the art of adapting therapeutic agents to the various expressions of disease and to pathological conditions.

There is too much positive knowledge of therapeutics at the present time, or perhaps it would be better to assert that too many means of selecting remedies with tolerable accuracy are known, to leave an excuse for empiricism in the use of medicines, except in perhaps a few instances where the testing of drugs is the object, or where obscurity of diagnosis and want of clearly defined expression leaves no alternative; there are many avenues open to intelligent prescribing.

Rational medicine rests upon the foundation of a liberal education, embracing knowledge of the laws of normal life, of the processes of disease, or abnormal life, of the physiological action of drugs, of their dynamical action and clinical effects, as well as the value and applicability of many adjuncts to therapeutics like electricity, massage, climato-therapy, etc..

It is an important qualification to be able to know when not to administer drugs, as well as to know just what to administer at the proper time. The principles of selection should involve so wide a knowledge of the various branches of collateral medicine that the physician would make no mistake in these matters. The prescriber who persists in administering *pulsatilla*, *caulophyllin*, *leontin*, *lilium tigrinum*, *sepia*, or *hydrastis* for the symptoms arising from the irritation due to chafing of an everted, lacerated

uterine cervix needs to extend his reading and widen his lines of thought. There are many conditions, also amenable to drugs, which may be relieved more promptly by other measures and measures which it would be more profitable, to the credit of the practitioner for future reputation, to adopt. St. Vitus' dance may be cured with drugs, but electricity so infinitely excels their action that they are not worthy of recognition in such a case. An excessively troublesome erythema may be made to yield to rhus, apis, juglans, or arctium lappa; but as the relief of the troublesome pruritus is the desideratum and in fact the indirect cure, a topical application may be found the short and commendatory way of affording relief. The most scientific method is that which succeeds best.

The conclusions arrived at by the ancients as to the expressions of disease were often crude and erroneous, for their light was a dim candle beside the better illumination of the subject afforded by the present knowledge of physiology, pathology, and therapia. Constipation was considered an infallible indication for the use of a cathartic. Diarrhea demanded an astringent. Pain called for a narcotic. These indications have grown to be so much a custom that with many it is difficult to view the subject in a more sensible light. Constipation may indicate the need of a cathartic and it may not: such cases require analysis. The difficulty may be due to an arrest of secretion that cathartics would aggravate, though they might satisfy the demands of a mind desiring a motion to follow. Astringents might aggravate an irritation upon which the flux depended and thus prove but sorry relievers of the condition, even though temporary arrest might follow. Narcotics induce a temporary suspension of nervous sensibility—paralysis—for a time, and also suspend in a measure important vital functions, and are to be avoided when there are intelligent indications for remedies which relieve by correcting perversion of vital processes.

It is important, then, that we adopt so far as possible a newer class of expressions for drug selection, one more in consonance with our better light on the subjects of physiology, pathology, and remedial agents.

The old classification of drugs offers many indications for

remedies which are not worthy of mention here, for they are so simple and apparent that no sagacity is required for their recognition, while many of the indications must become obsolete for reason of the adoption of modern measures which render them unnecessary. The physician who marches not with the progress of the times but remains wedded to the old ideas is thus laboring under an incubus. The old classification arose when disease was regarded as an entity—an imaginary devil to be forcibly ejected from the body, and the harsh and violent acting remedy, one which would prostrate the patient to a point just short of death, commended itself. Large doses of powerful remedies were the fashion then and unfortunately a fashion very difficult to change. To expel the disease so forcibly that it would not dare return seemed logical in the light that disease was regarded. But a change has come over the ideas of the therapist. Disease is now recognized as an absence of that which constitutes health, as a disturbance of the equilibrium of normal forces, as something lacking in most instances, which it is the province of the physician to supply, and as a condition precluding the embarrassing effects of heroic doses of medicine if healthy action is to be readily restored.

It is true that a condition of disease may render a system or part more than ordinarily impervious to the effects of a drug; for example, certain conditions attending paralysis may interfere with the specific influence of strychnia upon the spinal cord, or severe pain may so antidote the effects of a narcotic that double doses may be given for a time with impunity, but most conditions attended by hyperæmia or hyperæsthesia render a patient abnormally sensitive to drug influence.

Health then being the standard, a knowledge of physiological constants should be familiar to every physician, that departures from the normal state and the character of such departures may be accurately determined. Nor is a knowledge of the teaching of physiology of text-books all to be desired. The senses of the practitioner must be trained to accuracy to detect many expressions that a knowledge of written physiology and pathology might still leave out of the question.

(To be continued.)

The California Eclectic Medical Society.—Before our next issue the annual meeting of the State Association will have been a thing of the past and we desire to call the attention of our readers to its interests, for these pertain to the interest of every Eclectic practitioner in the State.

In the Pacific States, more than anywhere else in the country, the importance of State organization is paramount. Removed as we are from the older sections of Eclectic popularity, it is important that we make ourselves known by organized action to the public. Nowhere in the United States is there more ignorance among the people as to what constitutes an Eclectic physician than among the people of the Pacific Coast, and our adversaries having been the educators in this respect, the ideas formed of us are not always flattering. It devolves upon Eclectics either to carry their banner over the ramparts of the opposition or to retire from the field discomfited. Or if such a figure smack too much of the spread-eagle style, perhaps it would be better to observe that organization and co-operation are the great means by which we will make our ideas of medicine popular and ingratiate ourselves into the confidence of the people. We can never do this by the stay-at-home or hide-your-candle-under-a-bushel policy.

The older Eclectics of this State were meek and lowly lambs, if their works are any criterion by which to judge them. They were content to occupy a very small corner of the universe, to thankfully partake of the crumbs that fell from the masters' table. If they could be vouchsafed the privilege of practicing without being obliged to attend a course at Cooper, and take out a "regular" license, they considered themselves sufficiently favored.

But we have become a little more exacting than in time past. We believe we possess the best, most rational, and successful practice in the world, and are not content to sit down and live in obscurity, but are ambitious to be known a little further off.

Last year's meeting was reported a very successful one; in fact, they are increasing in interest every year. The first one the writer attended was one of the most prosy affairs he ever experienced. The whole time was occupied in laborious transaction of business which ought to have been done in half an hour. Dur-

ing one of the sessions, the writer arose to offer a resolution to expedite matters, thinking that something interesting enough to soften the asperity of the benches might follow if the everlasting drivel of prosiness could be finished, but was promptly and effectually squelched by the President. It became apparent afterward that when the business was over there was nothing left to keep the society together and to end this was to spoil the meeting.

But we have gotten past some of that nonsense. We are still quite parliamentarian in our methods, but we manage to get in more valuable work than a little drill in parliamentary practice.

We believe that any physician in the State who will come to the next meeting will feel repaid for the time and expense, though we know that considerable sacrifice is necessary upon the part of those living at quite a distance.

The Sulphite of Sodium Tongue and Blue Litmus Paper.—Professor Howe, in an article on the application of remedies to disease—the exact title of his article is not now remembered—remarked that no one knew that there was an acid condition present when the pallid mucous membranes and white coating of the tongue were found, without testing for acids to prove the statement.

The idea seemed so pertinent that the writer determined to make this subject one of experimental study, and has been for the month past testing every case where the salts of sodium seemed indicated, by moistening a strip of blue litmus paper on the surface of the white-coated tongue.

The results have been somewhat surprising to the writer, for while he believed that there must be an excess of acidity somewhere, since sodium sulphite invariably proved a corrective, he hardly expected to find a normally alkaline fluid like the saliva pronouncedly acid at any time unless immediately after the ingestion of such food. But in every case the blue litmus paper was promptly reddened as soon as moistened.

Testing of a healthy tongue with the same kind of paper proved that all was correct in this direction, as the paper in such cases remained blue as before.

In a case of cerebro-spinal meningitis, where the tongue was broad, flabby, and coated with the characteristic pasty white coating, the acidity persisted for five days, the patient meantime gradually improving under jaborandi, rhus tox and sodium sulphite, until the mucous membranes gradually assumed a normal color and the coating disappeared.

A severe case of typho-malarial fever from the Merced River country was a typical one, the acid reaction being marked, the broad, flabby tongue, pallid mucous membranes, elevated temperature—103 morning and 105 and 106 evening—with delirium at night, and other serious symptoms, yielding nicely to treatment, the sulphite of sodium being the leading remedy.

We intend to continue investigation in this direction. The beefsteak tongue—hydrochloric acid—is not so common here as that of the sulphite of sodium, but some cases will turn up by and by and we promise to report results.

Leontin.—Our Cincinnati neighbors have recently produced from caulophyllum an article which they entitle leontin, and for which they claim superior virtues as a regulator of the menstrual functions and as a *partus accelerator*.

From the reports already made we cannot see very clearly in what manner this agent can excel the remedy from which it is derived, in therapeutic property, for we have been able to obtain as marked results from caulophyllum as any that have been so far obtained from leontin both in amenorrhœa and in parturition, as well as in the preparation of patients for labor.

Caulophyllum triturated to the third decimal attenuation, and administered in two or three grain doses, is an admirable remedy for the very conditions in which leontin is recommended. Leontin is also drastic to the fauces like caulophyllum unless well diluted.

Now, having growled enough, we advise our readers to become acquainted with the new form, leontin. It may prove all that is claimed for it: at least it comes so well indorsed that it is deserving attention, and it is to be hoped that California will not be behind in the investigation of that which constitutes medical progress.

If the printer does not disappoint us there will be an article by Dr. Cooper in the Selection department describing some experience with this agent.

Passiflora Incarnata in Nervousness.—This remedy is an excellent one in convalescence from fevers where the patient is excessively nervous and troubled with insomnia.

We have been employing it in some cases of spinal meningitis after the acute symptoms had subsided, where the patients were unable to sleep either day or night, could not endure the bed, and were unable to maintain the sitting posture, with highly satisfactory results.

One of the worst of these, a middle-aged lady of highly delicate nervous organization, after taking it one day, remarked, "I have had the best night since I took sick; I slept so soundly that I forgot what an unpleasant experience I have been passing through."

The mother tincture of the homeopathic pharmacy is the form we have been using. Add ten drops of this to half a common tumbler of water, stir and order a teaspoonful every two hours.

It is not a remedy for the relief of pain in any sense, and does not bring rest when pain is a prominent symptom, nor does it act by benumbing sensibility. It is a dynamical agent acting by virtue of its power of promoting a normal equilibrium in disturbed nervous centers, the action being unappreciable except by the satisfactory rest produced.

EDITORIAL NOTES.

T. D. HALL, M. D., has located at 1156 Broadway, Oakland.

THERE has been quite an epidemic of cerebro-spinal meningitis in this section within the past two months.

WE have an eligible country location for a modern Eclectic. A graduate of the California Medical College preferred.

I. N. MONFORT, M. D., has recently come to Oakland to stay. He formerly practiced in Michigan, where he gave special attention to surgery. We welcome him among us, and wish him success.

Golden Days comes to hand every week, and is as attractive as ever for the boys. Each number contains a Sunday-school lesson. These are pronounced by competent critics to be the best published anywhere.

A. PATRON of the writer who has been a resident of the mountains of California for many years, asserts that spirits of turpentine locally and internally effectually cures the effects of poison oak in a short time and fortifies the individual against repetitions of the effects of the shrub.

ACCORDING to the report of the Los Angeles Allopathic Medical Society, the total number practicing in Los Angeles is 256.

Allopathists recorded in clerk's office.....	113
Homeopathsists " " " "	21
Eclectics " " " "	6

140

Nearly one-half of the above 256 are practicing in violation of the law. The district attorney has expressed his willingness to prosecute to a conviction any cases presented to his notice with the necessary evidence to form a charge.

MISCELLANY.

"SOME ADOPTED AMERICANS" is the title of an article in the November number of the *American Magazine*. This article was prepared by the editor of the *Journalist*, Mr. Allan Forman, who has made a careful study of the lower-class immigrants and tenement-house dwellers of New York City. Mr. Forman has not been a mere casual observer, but has lived in these densely-populated tenements, and is, therefore, competent to give strong and graphic pictures of the mode of life of these poor people without any aid from his imagination.

TREATMENT OF DYSENTERY BY NAPHTHALIN ENEMATA.—Dr. Gintergoff (*Russ. Medits.*) orders seven or eight grains in an ounce of water for a single enema, and finds that this in a very short time relieves the tenesmus and the burning sensation at the anus. The patient is able to obtain rest and sleep, and in some cases is cured without any repetition of the enema. In other cases two or three enemata have to be given at intervals of a few hours. Where needful, this treatment is combined with the internal administration of quinine.

BOOK NOTICES.

THE PHYSICIAN'S POCKET DAY-BOOK. Designed by C. Henri Leonard, M. A., M. D. Size, $7\frac{1}{2}$ inches long, $3\frac{1}{2}$ inches wide, and $\frac{3}{8}$ of an inch thick. Bound in red Morocco, for the pocket; pencil, loop and flap, red edges. Price, \$1.00, post-paid. The Illustrated Medical Journal Co., Publishers, Detroit, 1888.

This is the tenth year of issue of this exceedingly popular day-book, which contains several new features. Besides accommodating daily charges for thirteen months for fifty families, and the other usual memorandum pages, it has a very complete list of doses of old and new drugs, poisons and their antidotes, tried tests for urinary deposits, chemical and microscopical, obstetric calendar, disinfectants for the sick-room and vaults, tables of weights and measures, table of eruptive fevers, and drops in a drachm of fluid medicines.

CLINICAL LECTURES ON CERTAIN DISEASES OF THE NERVOUS SYSTEM. By J. H. Charcot, M. D. Translated from the French by E. P. Hurd, M. D. Published by Geo. S. Davis, Detroit. Paper, 25 cents; cloth, 50 cents.

Another of the Leisure Library Series, and a most instructive little work.

THE LIFE INSURANCE EXAMINER. A practical treatise on medical examinations for life insurance, by Charles F. Stillman, M. S., M. D.; Medical Examiner for the Mutual Life Insurance Company for the General Agency of the City of New York; Examining Surgeon of the Travelers' Insurance Company of Hartford, Conn.; for the City of New York; Clinical Professor of Orthopedic Surgery in the Woman's Medical College of the New York Infirmary; Orthopedic Surgeon to the New York Infant Asylum; Member of the American Orthopedic Association; Fellow of the New York Academy of Medicine; member of the New York Medico-legal Society, of the New York County Medical Society, etc., etc. Published by the Spectator Company, 16 Dey Street, New York. Price \$3.00 per copy.

THE CASE OF EMPEROR FREDERICK III. Full official report by the German physicians and by Sir Morell Mackenzie.

The German report translated by Henry Schweig, M. D., New York. This is the only edition giving the unabridged reports, with all of the illustrations, of Sir Morell Mackenzie and of the German physicians. Cloth, \$1.25. Paper, 75 cents. Address the publisher, Edgar S. Werner, 48 University Place, New York. Be sure to order the Werner edition.

